

12

**EUROPEAN PATENT APPLICATION**

21 Application number: 82830119.2

51 Int. Cl.<sup>3</sup>: **G 03 B 31/00**

22 Date of filing: 04.05.82

30 Priority: 25.09.81 IT 4937381

43 Date of publication of application:  
06.04.83 Bulletin 83/14

84 Designated Contracting States:  
AT BE CH DE FR GB LI NL SE

71 Applicant: Stufa, Vincenzo  
Via Pico, 18  
I-00189 Roma(IT)

71 Applicant: Salaris, Antonio  
Via Val Pellice, 77  
I-00141 Roma(IT)

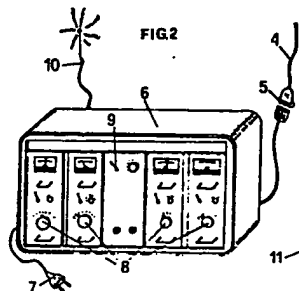
72 Inventor: Stufa, Vincenzo  
Via Pico, 18  
I-00189 Roma(IT)

72 Inventor: Salaris, Antonio  
Via Val Pellice, 77  
I-00141 Roma(IT)

74 Representative: Mascioli, Alessandro, Prof.Dr.  
c/o A.N.D.I. Associazione Nazionale degli Inventori Via  
Lima, 35  
I-00198 Roma(IT)

64 Apparatus for simultaneous cinematographic viewing in several languages.

67 Apparatus for contemporaneous showing of films in  
several different languages, with personalized reception for  
each viewer in a selected language.



Apparatus for simultaneous cinematographic viewing in  
several languages

STUFA Vincenzo, SALARIS Antonio; Via Val Pellice 77, Rome

The invention concerns an apparatus allowing contemporaneous cinematographic representation for viewers of different languages, each in his own language.

- 5 The difficulty encountered by viewers of films in their original edition is well known, with sub-titles in their mother tongue which distract their attention from the events shown, resulting in lost detail and wandering attention.

10

The aim of this invention is an apparatus to be placed in movie theaters to allow viewing of films projected in several languages contemporaneously, with personalized reception for each viewer in his pre-selected language.

15.

- This aim is achieved with an apparatus involving a film with one optical track and four magnetic tracks: the original version sound track is recorded on the former, while all or some of the others contain versions in different languages, so that all the recorded information, passing before the optical reading cell and the multiple head for magnetic reading in the projector, is sent contemporaneously to the preamplifiers, from where the signals are sent via cable to a fixed radio
- 20

0076237

transmitter, preferably frequency modulation, placed  
and balanced for the volume of the movie theater; said  
theater is equipped with antennas for the contemporane-  
ous transmission, to several portable receivers dis-  
5 tributed among the viewers, of the various versions,  
selected with a channel selector and received over  
earphones.

In one embodiment, said portable receivers have no  
10 channel selectors and are tuned to a transmitter signal  
corresponding to only one language.

In another embodiment, said receivers are not portable  
and are inserted in or connected to the seat or slot  
15 for each spectator.

The film used may be of the type used for stereophonic  
cinematographic versions, where the different language  
versions are recorded on the magnetic tracks, totally  
20 or partially replacing the sound effects.

A preferred embodiment of the invention is described  
below, in the enclosed figures 1, 2, 3 and 4.

25 Figure 1 shows a film with one optical track and four  
magnetic tracks.

Figure 2 shows an axonometric view of the fixed trans-  
mitter.

0076237

Figure 3 shows a portable receiver.

Figure 4 shows a block diagram of the operational scheme.

5

The drawings show in detail film 1 with optical track 2 for the original language version and magnetic tracks 3 for the translations, suitable for use in a projector of known type; signals from said film are read contemporaneously on all or part of said tracks 2 and 3, and sent via cable 4 and collector 5 to fixed radio transmitter 6, of frequency, amplitude, CB or other type modulation, supplied electric current via plug 7 and equipped with signal regulators 8 to vary the volume according to the intensity of the recording, with transformer 9 and antennas 10 to send the signals to portable receivers 11; said receivers are coherent with transmitter 6 and equipped with channel selector 12, switch and volume regulator 13, and headphone 15 with terminal 14.

In reference to the block diagram in figure 4, the low frequency signal of each individual channel  $C_1$ ,  $C_2$ ,  $C_3$  is fed into one of the modulators  $A_1$ ,  $A_2$ ,  $A_3$  at a suitable amplitude and frequency; the three output signals from said modulators (signals  $F_1$ ,  $F_2$ ,  $F_3$ ) are sent via a mixing circuit to a bearing generator at frequency  $F$ , which modulated in frequency from the above channels generates emission spectrum  $F-F_3$ ,  $F-F_2$ ,  $F-F_1$ ,  $F$ ,  $F+F_1$ ,

0076237

$F+F_2$ ,  $F+F_3$ .

Reception occurs by tuning the receiver to frequencies  $F+F_1$ ,  $F+F_2$ ,  $F+F_3$ , with a high pass filter M in the  
5 transmission circuit to eliminate or at least attenuate the frequency portion  $F-F_1$ ,  $F-F_2$ ,  $F-F_3$ .

In one possible embodiment, the apparatus according to the invention may be used for recording and projecting  
10 tapes in television studios.

Of course, the principle of the finding remains unchanged even when the forms of realization and the details of construction are widely varied with respect to that described and illustrated here, without  
15 going beyond the bounds of the invention.

0076237

Claims:

1. Apparatus for simultaneous cinematographic viewing in several languages.
- 5 2. Apparatus for simultaneous cinematographic viewing as claimed in claim 1, consisting of a film with one optical track and four magnetic tracks: the original version sound track is recorded on the former, while  
10 all or some of the others contain versions in different languages, so that all the recorded information, passing before the optical reading cell and the multiple head for magnetic reading in the projector, is sent contemporaneously to the preamplifiers, from where the signals are sent via cable to a fixed radio transmitter,  
15 preferably frequency modulation, placed and balanced for the volume of the movie theater; said theater is equipped with antennas for the contemporaneous transmission, to several portable receivers distributed among the viewers; of the various versions, selected with  
20 a channel selector and received over earphones.
3. Apparatus for simultaneous cinematographic viewing as claimed in the preceding claims, wherein said portable receivers have no channel selectors and are tuned  
25 to a transmitter signal corresponding to only one language.
4. Apparatus for simultaneous cinematographic viewing

as claimed in the preceding claims, wherein said receivers are not portable and are inserted in or connected to the seat or position for each spectator.

5 5. Apparatus for simultaneous cinematographic viewing as claimed in the preceding claims, wherein the film used may be of the type used for stereophonic versions, where the different language versions are recorded on the magnetic tracks, totally or partially replacing the  
10 sound effects.

6. Apparatus for simultaneous cinematographic viewing as claimed in claims 1, 2 and 5, with film 1 with optical track 2 for the original language version and magnetic tracks 3 for the translations, suitable for use  
15 in a projector of known type; signals from said film are read contemporaneously on all or part of said tracks 2 and 3, and sent via cable 4 and collector 5 to fixed radio transmitter 6, of frequency, amplitude, CB or  
20 other type modulation, supplied electric current via plug 7 and equipped with signal regulators 8 to vary the volume according to the intensity of the recording, with transformer 9 and antennas 10 to send the signals to portable receivers 11; said receivers are coherent  
25 with transmitter 6, and equipped with channel selector 12, switch and volume regulator 13, and headphone 15 with terminal 14.

7. Apparatus for simultaneous cinematographic viewing

as claimed in the preceding claims, wherein the low frequency signal of each individual channel  $C_1$ ,  $C_2$ ,  $C_3$  is fed into one of the modulators  $A_1$ ,  $A_2$ ,  $A_3$  at a suitable amplitude and frequency; the three output signals  
5 from said modulators (signals  $F_1$ ,  $F_2$ ,  $F_3$ ) are sent via a mixing circuit to a bearing generator at frequency  $F$ , which modulated in frequency from the above channels generates emission spectrum  $F-F_3$ ,  $F-F_2$ ,  $F-F_1$ ,  $F$ ,  $F+F_1$ ,  $F+F_2$ ,  $F+F_3$ ; reception occurs by tuning the receiver to  
10 frequencies  $F+F_1$ ,  $F+F_2$ ,  $F+F_3$ , with a high pass filter  $M$  in the transmission circuit to eliminate or at least attenuate the frequency portion  $F-F_1$ ,  $F-F_2$ ,  $F-F_3$ .



FIG.1

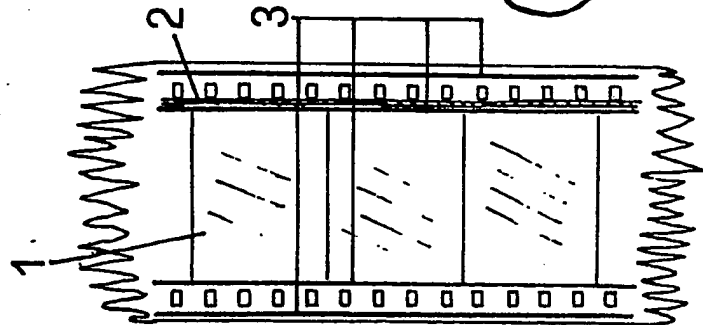


FIG.2

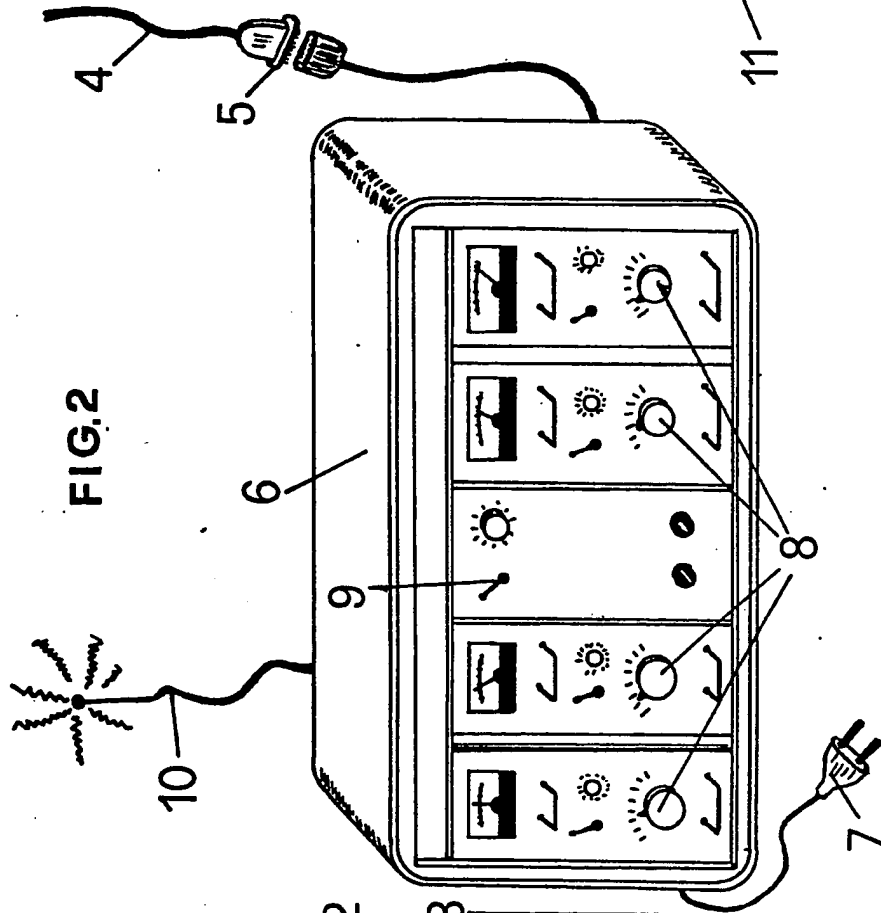
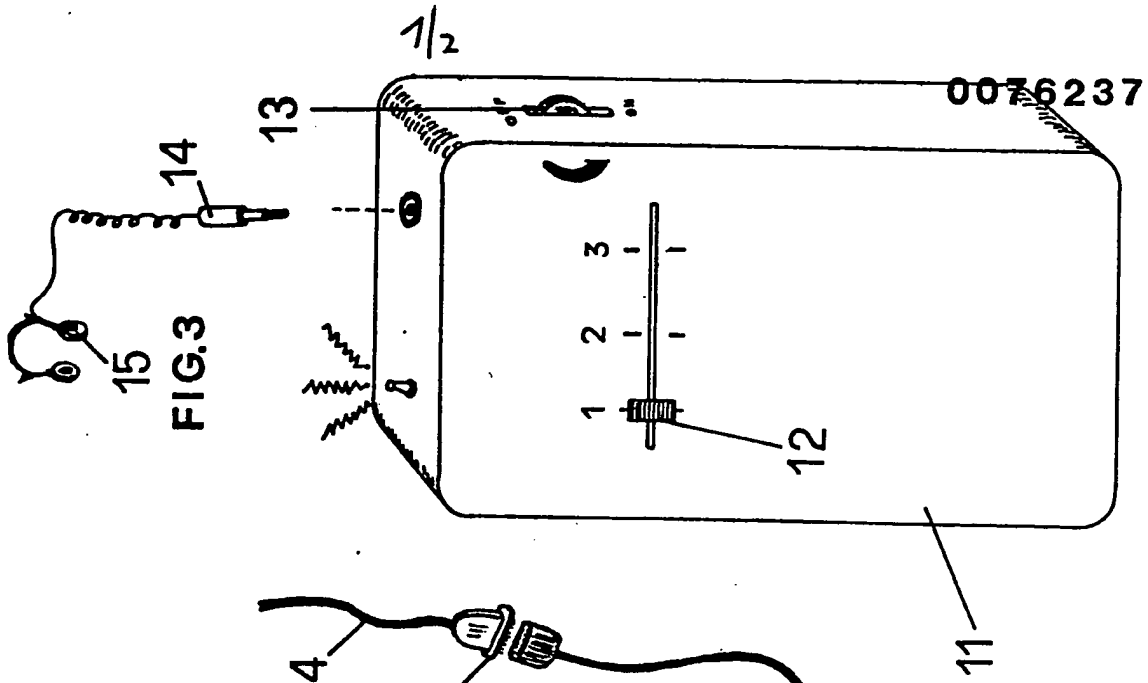


FIG.3



0076237

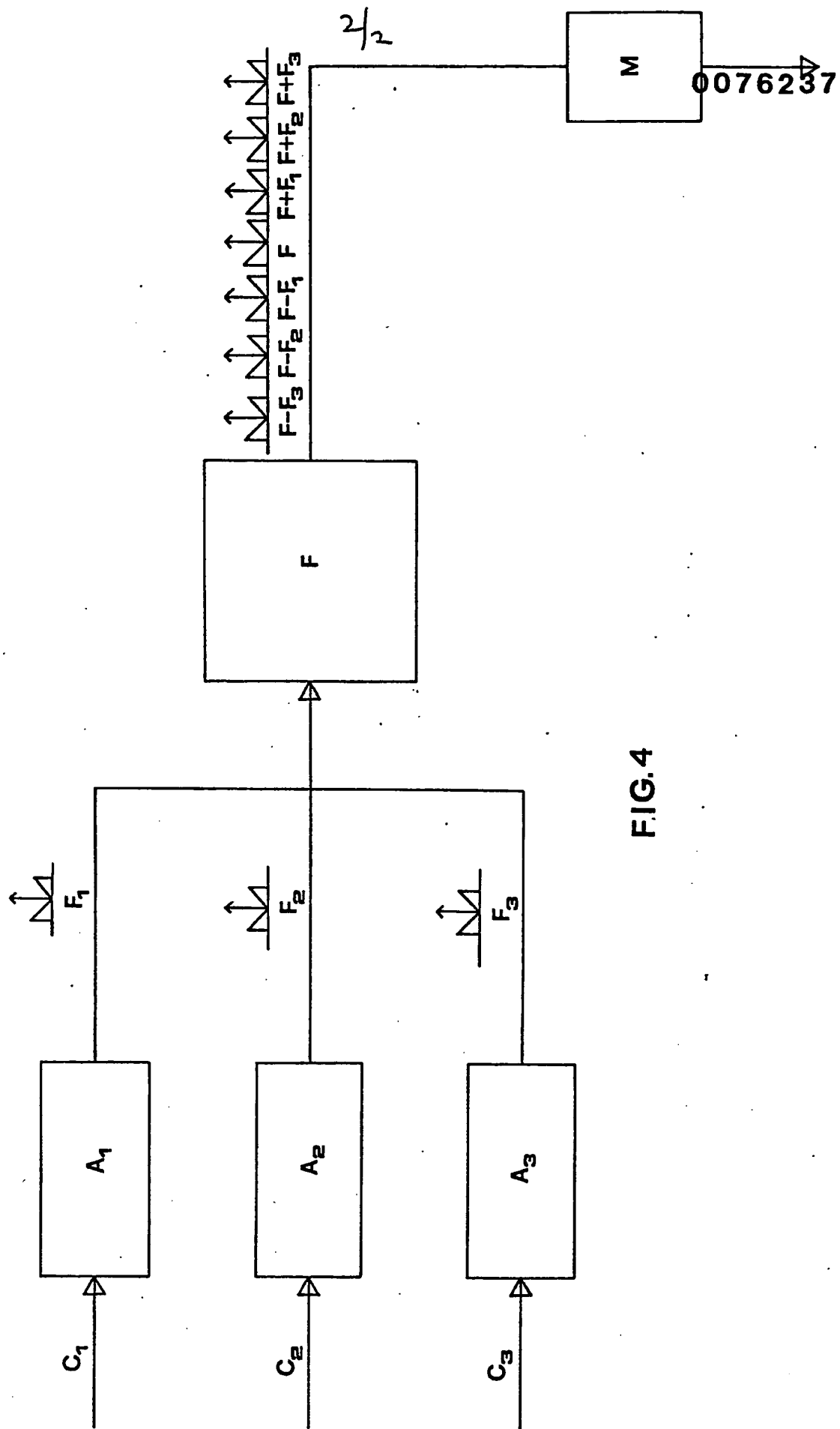


FIG. 4



Office européen  
des brevets

# RAPPORT DE RECHERCHE EUROPEENNE

0076237  
Numéro de la demande

EP 82 40 1743

DOCUMENTS CONSIDERES COMME PERTINENTS			
Catégorie	Citation du document avec indication, en cas de besoin, des parties pertinentes	Revendication concernée	CLASSEMENT DE LA DEMANDE (Int. Cl. 3)
X	DE-A-2 026 339 (VOLKSWAGEN) *En entier*	1	B 60 R 25/02
A	FR-A-1 314 114 (WILMOT-BREEDEN) *En entier*	1	
A	FR-A- 720 602 (NEIMAN) *En entier*	1	
A	DE-C- 823 703 (DAIMLER-BENZ) * En entier *	1	
A	EP-A-0 035 415 (PEUGEOT-CITROEN) *En entier*	1	
			DOMAINES TECHNIQUES RECHERCHES (Int. Cl. 3)
			B 60 R
Le présent rapport de recherche a été établi pour toutes les revendications			
Lieu de la recherche LA HAYE		Date d'achèvement de la recherche 05-01-1983	Examineur HEROUAN E.
CATEGORIE DES DOCUMENTS CITES			
X : particulièrement pertinent à lui seul Y : particulièrement pertinent en combinaison avec un autre document de la même catégorie A : arrière-plan technologique		T : théorie ou principe à la base de l'invention E : document de brevet antérieur, mais publié à la date de dépôt ou après cette date D : cité dans la demande L : cité pour d'autres raisons	



European Patent  
Office

# EUROPEAN SEARCH REPORT

0076237  
Application number

EP 82 83 0119

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl. 3)
X	FR-A-1 241 874 (COMPAGNIE EUROPEENNE DES MATERIELS DE TRANSMISSION) * the whole document *	1-4, 6	G 03 B 31/00
A	CH-A- 323 940 (LEE) * the whole document *	1	
A	FR-A- 942 769 (INTERNATIONAL STANDARD ELECTRIC CORP.) * figure 2 *	7	
			TECHNICAL FIELDS SEARCHED (Int. Cl. 3)
			G 03 B 31/00 G 11 B 31/00 H 04 J 1/04
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 21-01-1983	Examiner MEES G.
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons	